

Remarks

Applicants would like to thank the Office for allowing claims 10-22. The Office noted that claim 28 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 26 has been limited to the limitation of claim 28 and claim 26 should therefore be allowable.

35 USC §103 Rejections

On page 2, the Office rejected claims 23 and 24 under 35 U.S.C. 103(a) as being unpatentable over JP 11-101810 (Hashizume et al.) in view of US 5,811,017 (Matsuyama).

On page 3, the Office rejected claims 23 and 24 under 35 U.S.C. 103(a) as being unpatentable over JP 11-101810 (Hashizume et al.) in view of US 5,753,912 (Matsuyama).

On page 4, the Office rejected claim 25 under 35 U.S.C. 103(a) as being unpatentable over JP 11-101810 (Hashizume et al.) in view of US 5,811,017 (Matsuyama) as applied to claim 23 above, and further in view of US 5,245,863 (Kajimura et al.).

On page 5, the Office rejected claim 25 under 35 U.S.C. 103(a) as being unpatentable over JP 11-101810 (Hashizume et al.) in view of US 5,753,912 (Matsuyama) as applied to claim 23 above, and further in view of US 5,245,863 (Kajimura et al.).

The Office acknowledged that Hashizume et al. fails to expressly disclose the material composition of the cantilever (71a) or if an attachment material is used to connect the cantilever to the support.

However, the Office stated that the Matsuyama references disclose a cantilever/cantilever chip comprised of silicon supported on a silicon substrate/support

through a silicon oxide attachment.

The Office expressed the opinion that modifying the structure of Hashizume et al. to provide a silicon oxide attachment between the silicon support and cantilever would have been obvious to one of ordinary skill in the art because Matsuyama has shown that the method provides a structure having a thickness and shape desirable for high-resolution SPM measurements.

Without conceding to the veracity of the Office's analysis, applicants have, following the wording allowable claim 28, limited claim 23, the only independent claim in the above rejected groups of claims, to an attachment that is executed via a material which is the same as the cantilever and the rigid support.

Applicants also note that the two Matsuyama references teach the use of the silicone oxide film as etch mask when etching the silicon support substrate. As the person skilled in the art will readily understand a silicon film could not serve as etch mask. Thus, the Matsuyama references do not teach or suggest the alternative that remains in the claim, but rather can be considered to teach away from this alternative.

On page 6, the Office rejected claims 26 and 29 under 35 U.S.C. 103(a) as being unpatentable over US 5,753,912 (Matsuyama) in view of US 5,319,961 (Matsuyama et al.).

On page 7, the Office rejected claims 26 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,811,017 (Matsuyama) in view of US 5,319,961 (Matsuyama et al.).

On page 8, the Office rejected claim 27 under 35 U.S.C. 103(a) as being unpatentable over US 5,811,017 (Matsuyama) in view of US 5,319,961 (Matsuyama et al.) as applied to claim 26 above, and further in view of US 5,245,863 (Kajimura et al.).

Without conceding to the veracity of the Office's analysis, applicants have limited claim 26 to the subject matter of allowable claim 28.

Request for Telephone Interview

In view of the two Information Disclosure Statements (IDSs) submitted herewith, the undersigned respectfully request that the Examiner calls her at 301-657-1282 if he found the above argument persuasive.

The Commissioner is authorized to charge any fee deficiencies and overpayments to deposit account number 50-3135.

Respectfully submitted,

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